

Site History cont.

(present for over two hundred years), oil storage facilities, chemical facilities, a fertilizer plant, a cement storage facility, several hazardous waste cleanup sites, and a power plant.

EPA placed the site on the National Priorities List to best address the high levels of contamination. In the late 1980's and early 1990's, AWI conducted an investigation to assess the nature and extent of contamination at the site and to present remedial alternatives for the contaminated soil and creosote. EPA issued a ROD for the soils and creosote in 1995 that involved treating the contamination with bioremediation, with a contingency of excavation and thermal desorption. However, while collecting information to implement the ROD, EPA determined that the 1995 cleanup plan would not be successful (neither the bioremediation nor the excavation and thermal desorption) due to newly-found high concentrations of metals contamination.

In 2002, EPA began evaluating additional alternatives so a new cleanup plan could be selected for the soil and creosote. Meanwhile, EPA began studying the contamination in the ground and in the Southern Branch of the Elizabeth River.



United States Environmental Protection Agency

Region 3
1650 Arch Street (3HS52)
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ATTN: Larry Johnson

The primary contaminants found at the site are PAHs (including visible creosote); benzene, toluene, ethylbenzene, xylenes (BTEX); various metals; PCP; and dioxin.

SITE CONTACTS

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United States Environmental Protection Agency

Region 3
Atlantic Wood Industries Superfund Site
Portsmouth, VA
July 2007

EPA Seeks Public Comment on Proposed Cleanup Plan

Your Role in the Process

Community Involvement is critical to EPA's decision making process. You have a voice in telling us what you think about our cleanup plan.

Public Meeting

When? July 24, 2007
6:30 pm to 8:30 pm

Where? CRADOCK RECREATION CENTER
Social Hall
4300 George Washington Highway
Portsmouth, VA 23704

The U.S. Environmental Protection Agency (EPA) has developed a Proposed Remedial Action Plan (Proposed Plan) for cleaning up contaminated soils, sediments and groundwater at the **Atlantic Wood Industries (AWI) Superfund Site in Portsmouth, Virginia.**

The plan outlines seven options or alternatives for cleanup, including EPA's preferred cleanup option.

EPA's preferred cleanup option is Alternative 4:

- Cover the soil
- Consolidate some of the creosote and contain it
- Monitor the groundwater
- Dredge contaminated sediments and dispose of them behind enhanced off-shore sheet pile wall on the AWI
- Monitored natural recovery of sediments.
- Cost: \$45 Million

The Proposed Plan, which explains all seven cleanup alternatives, can be reviewed on the Internet at: <http://www.epa.gov/reg3hwmd/super/sites/VAD990710410/index.htm>.

To view the Proposed Plan, select 'July 2007 Proposed Plan'. To view the Administrative Record (the documents that EPA considered and relied upon to develop its preferred alternative), select 'on-line' under **Administrative Record Locations**.

The following locations have computers that can be used to view documents: **Portsmouth Public Library**, 601 Court Street, Portsmouth, VA 23704, **Chesapeake Library**, 298 Cedar Road, Chesapeake, VA 23320, **Kirn Memorial Library**, 301 E. City Hall Avenue, Norfolk, VA 23501

EPA will hold a public meeting to explain the Proposed Clean-up Plan and to hear and record your comments.

We Want Your Opinion!

The public is invited to submit comments on EPA's Proposed Plan anytime during the 30-day comment period. Comments will be accepted from:

July 11 - August 10, 2007
(Must be postmarked by midnight
August 10, 2007)

Please mail comments to:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

1650 Arch Street, 3HS23
Philadelphia, PA 19103
ATTN: Randy Sturgeon

You may also send comments via email to: johnson.larry-c@epa.gov

EPA's Nine Criteria Analysis

Before a final cleanup plan is chosen, all the options must be judged against nine criteria to make sure that EPA is selecting the best cleanup. The nine criteria are:

1. Overall Protection of Human Health and the Environment
2. Compliance with Applicable or Relevant and Appropriate Requirements
3. Long-term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility, or Volume through Treatment
5. Short-term Effectiveness
6. Implementability
7. Cost
8. State Acceptance
9. Community Acceptance

Rationale for EPA's Preferred Option

EPA believes that **Alternative 4** offers the following advantages compared to the other alternatives:

- It effectively encapsulates the highly contaminated river sediments while minimizing the risk of recontamination.
- It reduces the risk of DNAPL migration to deeper aquifers in the Historic Disposal Area for significantly less cost than Alternatives 5, 6, and 7 and is substantially easier to implement than these other alternatives.
- It provides for flexibility in the reuse of the site for industrial or recreation purposes, as determined by state and local authorities, without any reduction in protectiveness.
- It provides for flexibility in future uses of adjacent properties, including the Navy Southgate Annex, the Portsmouth Port and Industrial Authority property, the City of Chesapeake (potential future expansion of the Jordan Bridge), and the navigation channel.
- It is among the least costly of the alternatives.

Summary of Cleanup Options

EPA considered seven cleanup options.

Alternative 1: No Action.

Cost: \$0

Alternative 2: Soil Cover, Ground Water Monitoring, On-Shore Sheet Pile Wall, Sediment Cover, and

Monitored Natural Recovery of Sediments
Cost: \$38 million

Alternative 3: Enhanced Soil Cap, Ground Water Monitoring, On-Shore Sheet Pile Wall, Partial Dredging with On-site Disposal, Sediment Cover, and Monitored Natural Recovery of Sediments
Cost: \$49 million

Alternative 4: Soil Cover, Some Creosote Consolidation and Containment, Ground Water Monitoring, Dredging with Disposal Behind Enhanced Off-Shore Sheet Pile Wall and on the AWI Property, and Monitored Natural Recovery of Sediments
Cost: \$45 million

Alternative 5: *In-situ* Solidification/Stabilization of Soil and Creosote, Soil Cover, Ground Water Monitoring, Enhanced On-Shore Sheet Pile Wall, Dredging with Onsite Disposal Except for Sediment Cover with Habitat Restoration in Wyckoff Inlet, and Monitored Natural Recovery of Sediments
Cost: \$61 million

Alternative 6: Low-Temperature Thermal Desorption of Soil, Pump and Treat Creosote and Ground Water, Ground Water Monitoring, Enhanced On-Shore Sheet Pile Wall, Dredging with Onsite Disposal Except for Sediment Cover with Habitat Restoration in Wyckoff Inlet, and Monitored Natural Recovery of Sediments
Cost: \$119 million

Alternative 7: Combination of Excavation with Off-site Disposal and *In-Situ* Solidification/Stabilization of Soil and Creosote, *In-Situ* Chemical Oxidation of Ground Water, Ground Water Monitoring, On-Shore Sheet Pile Wall, and Dredging with Off-Site Disposal
Cost: \$293 million

Record of Decision

After the public comment period has ended and all the comments have been reviewed and carefully considered, EPA will select the final cleanup plan for the site. The final cleanup will be described in a Record of Decision (ROD). The answers to the public comments will be recorded in a document called the Responsiveness Summary, which is part of the ROD. If EPA gets any comments or information that change our preferred cleanup option, that will also be recorded in the ROD.

Risks from Contamination

As part of EPA's investigation, we looked at the potential for people to be exposed to elevated levels of contaminated soils, sediment and some shellfish. The sample results indicate that there is the potential for people to be exposed to contamination and that's why it's important for EPA to clean up the site.

Prolonged exposure to contaminated soils from the AWI site could result in adverse health effects to trespassers and on-site workers. Highly contaminated river sediments just offshore the AWI site present a potential health hazard to recreational users of the river. Exposure to wind-blown surface soil does not present a health risk to individuals at or near the site.

EPA recently evaluated the levels of contaminants in shellfish caught near the AWI site. Levels of contaminants were high enough to present a potential health risk to individuals who consume a high number of crabs over a lifetime from this stretch of the Southern Branch of the Elizabeth River. Pregnant women, women of child-bearing age, children, and other sensitive subgroups should limit their consumption to reduce their potential health risk. When eating crabs, individuals should consider eating the meat only instead of the whole crab since "the mustard" (hepatopancreas) of the crab contains the highest levels of contaminants.

Recreational activities are discouraged in the western half of the Southern Branch of the Elizabeth River from the Southgate Annex of the Norfolk Naval Shipyard (NNSY) north to the turning basin at the NNSY.

Due to PCB and kepone contamination in the area, the Commonwealth of Virginia has a fin fish fishing advisory for the James and Elizabeth Rivers.

In addition, harvesting oysters and mollusks from the Elizabeth River is banned because of bacteria and heavy metal contamination.

Consider Starting a Community Advisory Group!

Community Advisory Groups may be formed at any point and serve as a liaison between EPA and the community. Community members who wish to participate on a CAG should contact EPA's Community Involvement Coordinator, Larry Johnson at (215) 814-3239 for more information.

Technical Assistance Grant

EPA's Technical Assistance Grant (TAG) Program provides funds of up to \$50,000 to qualified citizens' groups affected by a Superfund site to hire independent technical advisors to help interpret and comment on site-related information. Since only one TAG may be awarded for a site, EPA encourages groups to consolidate to apply. For TAG information, please contact Amelia Libertz, TAG Coordinator at 1-800-553-2509.

What's Next?

Once EPA receives comments from the public, the Agency will issue a Record of Decision. Then EPA, along with the Virginia Department of Environmental Quality will begin negotiations with Atlantic Wood Industries and the U.S. Navy (parties potentially responsible for the contamination) about how to implement the selected cleanup plan. Once it is determined who will implement the plan, the design will begin and then the cleanup.

Site History

The AWI property, the location of a creosote and pentachlorophenol (PCP) wood-treating operation from 1926 until 1992, occupies approximately 48 acres of land on the industrialized waterfront area of Portsmouth, Virginia at the west end of the Jordan Bridge. The AWI property is across the street from another former creosote wood-treating facility: the Wyckoff Pipe & Creosote Company.

The Southern Branch of the Elizabeth River flows through a highly industrialized area, including the AWI facility, the former Wyckoff facility, Navy facilities